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CHEMISTRY

PAPER 3

(PRACTICALS)

OCTOBER 2022

**BSJE 2022**

**JOINT EVALUATION EXAMINATION 2022**

**CHEMISTRY PAPER 3 CONFIDENTIAL – 2022**

**INSTRUCTIONS TO SCHOOLS**

In addition to the fittings and apparatus found in a chemistry laboratory, each candidate will require the following:

**A: Each candidate**

1. About 25cm3 of **solution B**
2. About 80cm3 of 0.1M sodium hydroxide **solution**
3. One burette 0 – 50 ml
4. 1.3g of **solid A** **accurately** weighed supplied in a stoppered container
5. One pipette 25.0ml and a pipette filler
6. Thermometer (-10oC to 110oC)
7. One Filter funnel
8. 100ml plastic beaker
9. Two clean dry 250 ml conical flasks
10. Six (6) clean and dry test tubes on a test tube rack
11. One boiling tube
12. Watch glass
13. 1 label sticker
14. 0.3g of solid sodium hydrogen carbonate
15. About 500cm3 of distilled water supplied in a wash bottle
16. One 250ml volumetric flask
17. 2 filter papers (125mm Whatman no. 1)
18. One 10ml measuring cylinder
19. One metallic spatula
20. One test tube holder
21. One stopwatch
22. A white tile
23. About 2.0g of solid E supplied in a stoppered container
24. About 5ml of liquid F supplied in a stoppered container

**B: Access to:**

1. Phenolphthalein indicator supplied with a dropper
2. Source of heat
3. 0.2M aqueous sodium sulphate supplied with a dropper
4. 0.2M dilute hydrochloric acid
5. 0.2M sodium hydroxide solution supplied with a dropper
6. Acidified potassium dichromate (VI) solution

**C: Preparation of solutions and solids**

1. **Solution B** is prepared by accurately adding 172cm3of concentrated hydrochloric acid (density 1.18gcm3) to about 500cm3 of distilled water and diluting with distilled water to make one litre solution.
2. **Sodium hydroxide** is prepared by dissolving 4.0g of sodium hydroxide in 700cm3 of distilled water and diluting it to one litre.
3. **Acidified potassium dichromate (VI)**  is prepared by dissolving 30g of potassium dichromate (VI) in 400cm3 of 2M sulphuric (VI) acid and diluting with distilled water to 1 litre.
4. **Solid E** is a Barium hydroxide
5. **Solid A** is sodium hydrogen carbonate
6. **Solid F** is absolute ethanol